



WILDLIFE DIVERSITY PROGRAM “E-NEWS”

Iowa Department of Natural Resources
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BROKEN KETTLE BIRD CONSERVATION AREA DEDICATED

By Doug Harr
DNR Wildlife Diversity Program Coordinator

Iowa DNR dedicated its third official Bird Conservation Area (BCA) on April 11, in conjunction with the Iowa Field Office of The Nature Conservancy. This important grassy landscape, expected to preserve habitat for several species of declining migrant birds, is centered upon lands owned by the Conservancy and situated just northwest of Sioux City, Iowa. Approximately 40 people attended the dedication ceremony on a pleasant April afternoon, beginning with a short indoor ceremony and ending with a tour of the new Broken Kettle Grasslands BCA.

Bird Conservation Areas are designed to recognize very large expanses of good avian habitat on both public and private land, and are “anchored” by habitat under some type of permanent protection. While many of the dozen or more BCAs planned for Iowa will center upon DNR-owned lands, Broken Kettle is unique in that private landowners, including The Nature Conservancy, are protecting some of the region's’ best habitat. DNR and the Plymouth County Conservation Board also manage important pieces of the landscape here, but this BCA is really defined by Conservancy lands and private farms with land under conservation easements.

Official designation as a BCA also entitles landowners within the area to extra points when applying for USDA’s Wildlife Habitat Incentive Program (WHIP) benefits. DNR Private Lands Program will be available to assist landowners with applying and planning for the WHIP program. It is anticipated that the local economy might also realize benefits by attracting birdwatchers to the region. Loess Hills Audubon Society’s recent publication of a new birding trail guide to the Loess Hills certainly will add to the area’s attractiveness for birders.

The Wildlife Diversity Program is indebted to The Nature Conservancy and all other partners in this project. Without the cooperation of many individuals and groups, this exciting new effort in bird conservation might not have been possible.

Of Bald Eagles and Barn Owls

By Bruce Ehresman
DNR Wildlife Diversity Program Biologist

So far, it is starting out to be another great year for the Bald Eagle. Overall, we experienced a fairly mild winter, and Bald Eagles seem to have come through in wonderful shape for the nesting season. Already, 20 new Iowa eagle nests have been reported to Wildlife Diversity Program staff. Hardin, Worth, and Scott counties reported eagle nests for the first time in over a hundred years. Eagle nest reports have now been received for 62 Iowa counties, and I suspect eagles could now be nesting in nearly 70 counties. For a species that many of us thought might be gone as an Iowa nester forever, our awe just continues to grow each year as more eagle nests appear.

For those of you who thought that the Great Horned Owl is Iowa’s earliest nesting raptor, it might be time to rethink that supposed fact. It is not uncommon for Bald Eagles to begin nest building in November or December,

although most pairs don't begin serious nest construction until January or February. There is one particular eagle in Sac County that holds the record for early egg-laying. During the last two years, she appears to have laid her first egg within the first week of February. That certainly rivals the earliest nesting horned owls that I am aware of.

And speaking of owls, I am happy to report that we have news of this year's first Barn Owl nest. It is the first confirmed Barn Owl nest in Iowa since 2000. The site is in Marion County, and the nest location is about 40 feet up in a barn cupola. The coolest bit (at least cool to those of us who have helped put up several hundred Barn Owl nest boxes) is that the owls have chosen to nest in a box placed for Barn Owls in 1989. Many bird species for which we put up nest boxes seem to find the boxes right away. Not so for the Barn Owl; it often can take many years before a well located nest box is occupied. Perhaps that is also what makes it so rewarding when this Endangered species decides that a particular nest box looks pretty inviting after all. I am hopeful that our next report to you will be about many Barn Owl babies freely flying!

Since our program's staff is few in number and we cannot spend the time in the field that we would like to, we continue to count on you and your acquaintances to report eagle nest sites and Barn Owl sightings to us. The Barn Owl, in particular, can use all the help that we can afford it. We do appreciate your help, and thanks for caring!

Iowa Falcon Update

By Pat Schlarbaum

Natural Resource Technician, WDP

Falcon pairs have returned to five nesting territories this spring. Efforts will be ongoing to identify adults but from all appearances there will be falcons fledging throughout Iowa this summer. In Cedar Rapids Theresa Chapman reports their pair has returned and all is prepared for a successful nesting. Four eggs had been laid by April 8. The USFWS has randomly selected the Cedar Rapids pair for monitoring the next 15 years. As a requirement for the Peregrine Falcon to be uplisted from endangered to threatened status, five percent of the population would be monitored intensively. The Cedar Rapids site will be our contribution to that national database. Hopefully, this recovering falcon population will not be subjected to the perils of our last population. Those falcons were eradicated in the 1960's east of the Missouri River by biocide practices of post WW II era. Much emphasis will be placed on the maintenance of this renewed population to not place these birds in jeopardy of extinction again.

In Des Moines Paul Burkett of American Republic Insurance reports a pair in second alcove of NW corner of their building at 606 6th Ave. Efforts are underway to set up "falcon cam" to be broadcast over Internet when young hatch. A link to the site will be located on DNR home page.

Dave Sebbens of Mid-American Energy reports their pair in Davenport has been seen periodically all winter. Hopefully they will once again occupy their nest box provided by falconer Tom Deckert at their Mid-American headquarters at 106 E. second St. WQAD television will be providing an internet site at <http://www.wqad.com> when young are hatched. Also with Mid-American Energy, Jim Haack reports the pair that successfully nested high atop their power plant smoke stack near Louisa has returned.

On a bluff near the Alliant Energy plant at Lansing a falcon pair has been observed on the rock ledges of the bluff. This "wild" pair has been alternating between the ledges and a nest box on the bluff placed by falconers Dave Kester and Bob Anderson. Hopefully this site can once again lure historic falcon banders, Dan Berger, Jack Oar, Jim Grier, Jack Oberg, Dave Seal, and Chuck Sindelar to return to band young once again. These individuals made up the cadre of wildlife enthusiasts affectionately referred to as the "gaboons" in Frances Hammerstram's books. It has been 45 years since they last banded birds on these bluffs.

We'll be keeping our fingers crossed for successful nesting and announce dates in June when any falcon banding will be occurring. Hope to see you at these activities.

Try a Pre-emptive Approach Against Mosquitos "of Mass Suction

By Mark "Mac" McInroy

Natural Resources Technician, WDP

General Guidelines for Community-wide Mosquito Control **(Compiled notes from ISU Extension Service and Iowa Dept. of Public Health)**

Last year Iowa witnessed a resounding buzz much like what you would hear on a damp, humid, and still summer night in a quiet neighborhood. Only this sound wasn't from the culprit mosquito, but rather the press coverage of the West Nile Virus (WNV). With the "education" that the media gave us about West Nile and the vector mosquito, I'm not sure there was enough mentioned about how to wage a "pre-emptive strike" against the critters (hot phrase this year). Therefore, please accept this listing as a general guideline of information; as well as encouragement to inquire with your local city hall how they manage and evaluate mosquitoes in your neighborhood. Much of this information is a compilation of notes from conversations with Dr. Russel Courier of the Iowa Department of Public Health and Dr. Ken Holscher, Iowa State University Extension Services entomologist. As well as findings from the Centers for Disease Control and Prevention website.

Mosquito Biology- Not all mosquitoes are created equal. Mosquito populations are dependant upon the frequency and amount of rain during spring, summer, and fall. There are over 50 species common to Iowa that inhabit a range of opportunities. 95% of the bites on humans (mammals) in Iowa are from the species *Aedes vexans*. Whereas the species *Culex pipiens* is more of a bird lover and seldom will bite a human. *Aedes spp.* is referred to as the floodwater mosquito because it develops in temporary puddles and pools that follow rain events. According to Dr. Ken Holscher, ISU Extension Entomologist, female *Aedes spp.* mosquitoes drop their eggs in low-lying areas. When these areas become "flooded", the eggs hatch and the life cycle begins. Life cycle length from larvae to adult is 7-10 days if temperatures are 80's and above. Of course there are the obvious areas of wetlands, ponds, oxbows of a stream, etc.; but it is important to understand there are many other opportunities including: a bird bath, tire swing, the ditch by your mailbox, a puddle in your garden, an ephemeral wetland in a field, or even roof tops and rain gutters.

Mosquito Statistics- Although WNV has gotten recent media attention and concern in Iowa, Dr. Holscher points out that the mere presence of large numbers of floodwater mosquitoes does not equate to an increased threat of the virus. In fact, *Aedes spp.* is not involved in the transmission of WNV, encephalitis, or other human diseases. It is the rare and strange scenario of if *Culex spp.* mosquitoes were to bite a WNV infected bird then bites a human, that person might show signs of WNV infection. If bitten by a mosquito that is infected, there is less than 1% chance of becoming severely ill. Dr. Russel Courier (Iowa Dept. of Public Health, Environmental Epidemiologist) even states that 8 in 10 do not even know they have it.

General Mosquito Control Program- Dr. Ken Holscher strongly emphasizes that a community wide, large-scale approach is best. Decide where your 7-10 day puddle and pool areas are and what control you have on that area. Consider mapping the potential sources around the entire community. Aerial view- after a light rain go up in a plane and take a look at rooftops and hard to see areas. Decide which puddles and pools can be easily drained or filled. Control the mosquito before the biting stage. Communities tend to wait until public complaints to treat the problem. If the control program is complaint driven, then it limits its effectiveness dramatically. Dr. Holscher says a more anticipatory program that includes larviciding can minimize complaints. Also, evaluate effectiveness at the end of the season. Communities will be faced with the debate of budget and fears; therefore an evaluation can properly guide these discussions. Understand that complete elimination, while virtually impossible, is not necessarily a proper goal either. At certain times a mosquito can benefit certain species of animals as a food source, particularly birds and herps associated with water.

General Insecticide info- The chemical choice is generally driven by cost and effectiveness. The conflict of fears will be the main debate for communities: fear of the mosquito vs. fear of the chemical. People should fear the toxicity of the chemical long before considering the threat of a disease from a mosquito (Holscher).

Mosquito Adulticiding- This is a broad-spectrum application. It will kill all insects that it touches. There is no residual and they are only a contact pesticide. They affect the nervous system of the insect. Typically applied "fogger" style, which is to rely on drift (very small particle size) and therefore no control on hitting the target. For mosquito control it is usually done when adults are active (dawn/dusk). Generally much fewer other insects are active at these times. Due to the small particles attaching to the first thing it hits, the drift into trees is limited to how closed (tight) the canopy is. More traditional insecticides are available for application through sprayers and foggers, but these applications are generally short term in their effectiveness; perhaps better suited for limited applications or during public health emergencies rather than as a routine part of a mosquito management system (Holscher).

Mosquito Larviciding- This is very specific to mosquitoes and easy to target. Due to the seek-and-finding of standing water in the community this can be labor intensive especially the first couple of years. If larvae are found to be developing in these sources, they can be safely and effectively treated with products containing the insect growth regulator methoprene or with products containing Bacillus bacteria (Holscher). Larviciding avoids the fear of the toxicity effects on humans since it is very controlled. These products affect only insects and are especially preferred if other desirable animals are known: to be in the water (fish), will drink the water (pets), or may play in the water (kids). Larger cities have better productivity and efficiency than smaller towns. Smaller towns tend to have a peripheral marsh or wetland just outside of city limits. Dr. Holscher mentions that Des Moines has done larviciding with better results and fewer complaints.

Biological Control- Additional and supplemental control aspects can be utilized such as establishing purple martin houses and bat houses. These animals do eat numerous amounts of insects, although it is likely that the impact on mosquito control may be minimal. Activity periods of martins and mosquitoes probably do not overlap enough to consider martins a major control factor. Bats feed primarily on the larger insects that tend to fly at an altitude much higher than mosquitoes tend to fly. At the risk of discounting the effectiveness of these flying insectivores, I still encourage you to incorporate housing structures for bats and martins in your neighborhood. If for no other reason than to diversify the flying space of the sky as well as to combat the many other pestilent insects of the area.

Prevention or “pre-emptive” Control: The most effective and long-term approach is elimination of mosquito breeding water sources over a large area. This is probably the simplest, cheapest, and most environmentally friendly method of control; however, it is limited by time and labor. Each of us could probably find a breeding ground in our own possession around the house. Check that your gutters are flowing empty. Empty your birdbath once a week to break the life cycle of developing larvae. Treat puddles that last over 7 days with a small amount of vegetable oil to keep the larvae from emerging. Drill drainage holes in the bottom of the tire swing as well as the tire sandbox. Unfortunately, while you could conceivably eliminate all mosquito development on your property, you may not notice a reduction in mosquito numbers. Dr. Holscher points out that is because floodwater mosquitoes can fly several miles from where they were developed. He continues by saying, this is why the most effective mosquito management programs are those that involve the entire community and encompass a large area.

Truly, the quickest, simplest, and most sensible control from being bitten is personal protection. If possible, avoid outdoors during the evening hours (peak times of mosquito activity). For those of us who are gluttons for punishment, wear long sleeves. And depending upon whom you ask, there are numerous other methods of combat that can be tried. One of my personal favorites is a cigar and a dab of vanilla on the back of my neck and hands. If all else fails, try the whole shelf of sprays and lotions that have various degrees of effectiveness specific to each individual.

In conclusion, I would like to encourage you to call your local city hall and ask their method of control. Try not to *poke* around so much that you *bug* people and are considered a *pest* or you may get cigar smoke blown in your face ☺. Ask if they evaluate the effectiveness each year. Have they ever tried larviciding? How pro-active is the communication of prevention in the community? Realize that their response may be driven by cost and time available and not necessarily by best management practices. Also, take a look around your property to see where you can do your part. Check your tire swing, gutters, ditch by the mailbox, sandbox, garden, etc. Begin a bat house or martin house project. **Probably most effective is to get active with your city hall to communicate prevention in the community by actively seek-and-finding the 7-10 day puddles and pools in the neighborhood.** I found a very successful school and community project in the Marshalltown area done by the Franklin Elementary School 5th grade in 2002. Please call your local ISU-Extension services for more details on this project. Thank you for the consideration and your time. Please have a wonderful spring.

Take advantage of the following resources for additional information:

- 1) Ken Holscher- Assoc. Prof. of Entomology at ISU. 515-294-1101.
 - 2) ISU extension Services in your county: Statewide directory located at the following link <http://www.extension.iastate.edu/Counties/state.html>
 - 3) The Centers for Disease Control located at the following link <http://www.cdc.gov/>.
 - 4) Iowa Department of Public Health
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Wildlife Diversity Tidbits

Iowa DNR has received word it will qualify for a third year of federal funding through the State Wildlife Grants (SWG) program. This year Iowa qualifies for \$732,213—less than last year but still much needed. DNR receives SWG money only on a project-by-project basis, and it must provide equal matching funds. Thus, if we hope to acquire a \$100,000 tract of forest for songbirds (or any other project), \$50,000 would come from the SWG allocation, and DNR must match with another \$50,000. Our budget simply has no room for such matches, so we will again be looking for groups and individuals willing to help us find the necessary match. A bill to raise the price of Iowa's distinctive REAP license plates would have provided most funding needed by DNR to match the federal dollars. That bill passed the Iowa Senate nicely, thanks to the efforts of Senator Mary Lundby (R-Cedar Rapids), but at newsletter publication time it is locked up in a House Committee and may be lost for this year.

New projects underway or considered for funding with current SWG allocations include:

- research on grassland birds in the Loess Hills
- assistance with NatureMapping (a program offered by ISU Extension)
- assistance with the Audubon Society's "Important Bird Area" program
- additional Trumpeter Swan restoration
- acquisition of 70 acres of riparian bird habitat along the Big Sioux River in Lyon County
- acquisition of 20 acres of songbird/turkey timber in Davis County
- republishing the popular "Bats of Iowa" booklet

Be sure to see the new birding trail guide published by Loess Hills Audubon Society. Single copies are available for \$4.00 from Loess Hills Audubon Society, PO Box 5133, Sioux City, IA 51102-5133.

Upcoming events of interest:

- Trumpeter Swan Banquet, ISU, April 26
- International Migratory Bird Day (statewide), May 10
- Wings & Wetlands Weekend, Iowa Great Lakes, May 17-18
- Iowa Ornithologists Union Meeting, Cedar Falls, May 16-18
- Project A.W.A.R.E. Canoe Trip, Maquoketa River, June 1-8 (see separate AWARE WEB info attachment)
- NatureMapping Level II—Bird Module Training, Kent Park, Scott County, June 21

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